

INTERNATIONAL SEARCH REPORT

International Application No

PC 03/04853

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C10G67/06 C10G25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C10G B01D C10M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, API Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 179 994 B1 (CLARK JANET R ET AL) 30 January 2001 (2001-01-30) claim 1; figure; examples 1-3; tables 3,5 column 1, line 66 -column 2, line 7 column 9, line 11-60 ---	1-4
X	US 6 332 974 B1 (RYAN DANIEL F ET AL) 25 December 2001 (2001-12-25) claim 1; figure; examples 1-3; tables 1,2 column 1, line 50-65 column 8, line 15-64 ---	1-4
A	GB 815 264 A (FORSCH PATENTVERWERTUNG GES) 24 June 1959 (1959-06-24) claim 1; figure 1 * page 1, lines 28-35 and 74-91 * --- -/--	1-4

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

23 July 2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 95 17482 A (MOBIL OIL CORP) 29 June 1995 (1995-06-29) page 2, line 8-23 page 5, line 13-18 page 5, line 34 -page 6, line 8 -----</p>	1-4

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Information on patent family members

International Application No

PCT/JP 03/04853

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6179994	B1	30-01-2001	AU 752602 B2	26-09-2002
			AU 5693899 A	27-03-2000
			BR 9913412 A	22-05-2001
			CA 2340627 A1	16-03-2000
			EP 1144552 A2	17-10-2001
			JP 2002527530 T	27-08-2002
			NO 20011000 A	04-05-2001
			WO 0014184 A2	16-03-2000
			US 6375830 B1	23-04-2002
US 6332974	B1	25-12-2001	AU 750548 B2	18-07-2002
			AU 5680899 A	03-04-2000
			BR 9913583 A	22-05-2001
			CA 2341607 A1	23-03-2000
			EP 1144551 A2	17-10-2001
			JP 2002538232 T	12-11-2002
			NO 20011245 A	10-05-2001
			TW 495548 B	21-07-2002
			WO 0015736 A2	23-03-2000
GB 815264	A	24-06-1959	NONE	
WO 9517482	A	29-06-1995	DE 69424442 D1	15-06-2000
			DE 69424442 T2	24-08-2000
			EP 0736079 A1	09-10-1996
			JP 9507092 T	15-07-1997
			WO 9517482 A1	29-06-1995